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PATENT  
Attorney Docket No.: 015389-002950US  
Client Reference No.: 18/206P2

On OCT. 6, 2003

TOWNSEND and TOWNSEND and CREW LLP

By: Nicole M. Wartell  
Nicole M. Wartell

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of:

CECH et al.

Application No.: 08/974,584

Filed: November 19, 1997

For: TELOMERASE REVERSE  
TRANSCRIPTASE

Examiner: Myers, Carla J.

Art Unit: 1634

SUPPLEMENTAL INFORMATION  
DISCLOSURE STATEMENT UNDER 37  
CFR §1.97 and §1.98

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

The references cited on attached form PTO/SB/08A and PTO/SB/08B are being called to the attention of the Examiner. Copies of the references are enclosed. It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

As provided for by 37 CFR 1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

10/09/2003 HROCHA1 00000010 201430 00974584

01 FC:1006

100.00 DA

This IDS is being filed before the mailing date of the final Office Action or Notice of Allowance.

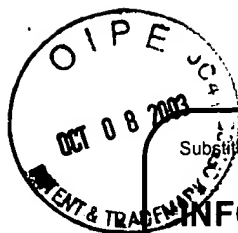
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Respectfully submitted,

A handwritten signature in black ink, appearing to read "Scott Ausenhus", written over the typed name.

Scott L. Ausenhus  
Reg. No. 42,271

TOWNSEND and TOWNSEND and CREW LLP  
Two Embarcadero Center, 8<sup>th</sup> Floor  
San Francisco, California 94111-3834  
Tel: 303-571-4000  
Fax: 303-571-4321  
SLA:nmb



Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 1 of 5

**Complete if Known**

|                        |                   |
|------------------------|-------------------|
| Application Number     | 08/974,584        |
| Filing Date            | November 19, 1997 |
| First Named Inventor   |                   |
| Art Unit               | 1634              |
| Examiner Name          | Myers, Carla J.   |
| Attorney Docket Number | 015389-002950US   |

**U.S. PATENT DOCUMENTS+**

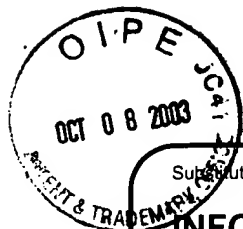
| Examiner<br>Initials* | Cite<br>No. <sup>1</sup> | Document Number                          | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines, Where<br>Relevant Passages or Relevant<br>Figures Appear |
|-----------------------|--------------------------|--|--------------------------------|--|---|
|                       |                          | Number Kind Code <sup>2</sup> (if known) |                                |  |   |
|                       | A1                       | US-5,597,697                             | 01-28-1997                     | Diamond  |   |
|                       | A2                       | US-5,747,317                             | 05-05-1998                     | Cao  |   |
|                       | A3                       | US-5,770,422                             | 06-23-1998                     | Collins  |   |
|                       | A4                       | US-5,917,025                             | 06-29-1999                     | Collins  |   |
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|                       | A10                      | US-6,617,110 B1                          | 09-09-2003                     | Cech et al.  |   |

**FOREIGN PATENT DOCUMENTS**

| Examiner<br>Initials* | Cite<br>No. <sup>1</sup> | Foreign Patent Document   |                     |                                   | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited<br>Document | Pages, Columns, Lines,<br>Where Relevant<br>Passages or Relevant<br>Figures Appear | T <sup>6</sup>           |
|-----------------------|--------------------------|---------------------------|---------------------|-----------------------------------|--------------------------------|---|--|--------------------------|
|                       |                          | Country Code <sup>3</sup> | Number <sup>4</sup> | Kind Code <sup>5</sup> (if known) |                                |   |  |                          |
|                       | B1                       | GB                        | 2 317 891           | A                                 | 04-08-1998                     |   |  | <input type="checkbox"/> |
|                       | B2                       | PCT                       | WO 93/23572         | A1                                | 11-25-1993                     |   |  | <input type="checkbox"/> |
|                       | B3                       | PCT                       | WO 94/17210         | A1                                | 08-04-1994                     |   |  | <input type="checkbox"/> |
|                       | B4                       | PCT                       | WO 95/13382         | A1                                | 05-18-1995                     |   |  | <input type="checkbox"/> |
|                       | B5                       | PCT                       | WO 96/01835         | A1                                | 01-25-1996                     |   |  | <input type="checkbox"/> |
|                       | B6                       | PCT                       | WO 98/07838         | A1                                | 02-26-1998                     |   | see abstract   | <input type="checkbox"/> |
|                       | B7                       | PCT                       | WO 98/08938         | A1                                | 03-05-1998                     |   | see abstract   | <input type="checkbox"/> |
|                       | B8                       | PCT                       | WO 98/14592         | A2                                | 04-09-1998                     |   |  | <input type="checkbox"/> |
|                       | B9                       | PCT                       | WO 98/14593         | A2                                | 04-09-1998                     |   |  | <input type="checkbox"/> |
|                       | B10                      | PCT                       | WO 98/21343         | A1                                | 05-22-1998                     |   |  | <input type="checkbox"/> |
|                       | B11                      | PCT                       | WO 98/23759         | A2                                | 06-04-1998                     |   |  | <input type="checkbox"/> |
|                       | B12                      | PCT                       | WO 98/37181         | A2                                | 08-27-1998                     |   |  | <input type="checkbox"/> |
|                       | B13                      | PCT                       | WO 98/45450         | A1                                | 10-15-1998                     |   |  | <input type="checkbox"/> |
|                       | B14                      | PCT                       | WO 98/59040         | A2                                | 12-30-1998                     |   |  | <input type="checkbox"/> |
|                       | B15                      | PCT                       | WO 99/01560         | A1                                | 01-14-1999                     |   |  | <input type="checkbox"/> |
|                       | B16                      | PCT                       | WO 99/33998         | A2                                | 07-08-1999                     |   |  | <input type="checkbox"/> |
|                       | B17                      | PCT                       | WO 99/38964         | A2                                | 08-05-1999                     |   |  | <input type="checkbox"/> |
|                       | B18                      | PCT                       | WO 00/46355         | A2                                | 08-10-2000                     |   |  | <input type="checkbox"/> |

Examiner  
SignatureDate  
Considered

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Sheet 2 of 5

**Complete if Known**

|                        |                   |
|------------------------|-------------------|
| Application Number     | 08/974,584        |
| Filing Date            | November 19, 1997 |
| First Named Inventor   |                   |
| Art Unit               | 1634              |
| Examiner Name          | Myers, Carla J.   |
| Attorney Docket Number | 015389-002950US   |

**NON PATENT LITERATURE DOCUMENTS**

| Examiner<br>Initials * | Cite<br>No. <sup>1</sup> | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item<br>(book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s),<br>publisher, city and/or country where published. | T <sup>2</sup> |
|------------------------|--------------------------|---|----------------|
|                        | C1                       | ADAMSON, D. et al. "Significant Telomere Shortening in Childhood Leukemia", <i>Cancer Genet. Cytogenet.</i> , 1992; pp. 204-206, Vol. 61  |                |
|                        | C2                       | AUTEXIER, CHANTAL, et al., "Telomerase and cancer: revisiting the telomere hypothesis; Trends in Biochemical Sciences, 1996, pp. 387-391, Vol. 10, No. 21.  |                |
|                        | C3                       | AVILION, A., "Characterization and expression of human telomerase," Dissertation Abstracts International", 1996, pp. 5930-B, Vol. 56, No. 11  |                |
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|                        | C5                       | CHIU, et al. "Replicative senescence and cell immortality: the role of telomeres and telomerase (44075)", <i>Proc. Soc. Exp. Bio. Med.</i> , 1997, pp. 99-106, Vol. 214.  |                |
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|                        | C9                       | COUNTER, C. et al. "Telomerase Activity in Normal Leukocytes and in Hematologic Malignancies" <i>Blood</i> ; May 1, 1995; pp. 2315-2320, Vol. 85, No. 9.  |                |
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|                        | C16                      | Genbank Accession No. AA299878; April 18, 1997  |                |

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| Examiner<br>Signature |  | Date<br>Considered |  |
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Sheet 3 of 5

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|------------------------|--------------------------|---|----------------|
|                        | C17                      | Genbank Accession No. AA311750; April 19, 1997 ✓  |                |
|                        | C18                      | Genbank Accession No. L38903; January 30, 1995 ✓  |                |
|                        | C19                      | Genbank Accession No. Q06163; November 01, 1995   |                |
|                        | C20                      | Genbank Accession No. S39696; October 07, 1994 ✓  |                |
|                        | C21                      | Genbank Accession No. S53396; May 5, 1995 ✓   |                |
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|                        | C25                      | GREIDER, C. "Telomeres, Telomerase and Senescence"; <i>BioEssays</i> ; 1990; pp. 363-369, Vol. 12, No. 8. ✓   |                |
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|                        | C30                      | HEALY, K. C. "Telomere dynamics and telomerase activation in tumor progression: prospects for prognosis and therapy" <i>Oncol. Res.</i> , 1995, pp. 121-130, Vol. 7. ✓  |                |
|                        | C31                      | HENDERSON, C. Cancer genetics gene regulates telomerase resulting in death of cancer cells; <i>Gene Therapy Weekly</i> ; 11 September 1995. ✓   |                |
|                        | C32                      | HIYAMA, E. et al. "Correlating telomerase activity levels with human neuroblastoma outcomes"; <i>Nature Medicine</i> ; 3 March 1995; pp. 249-255, Vol. 1, No. 3. ✓  |                |
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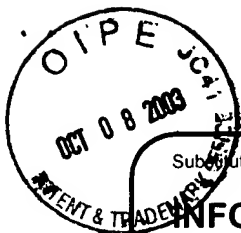
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|------------------------|--------------------------|---|----------------|
|                        | C34                      | JÄHNE, A. et al. "Genetic Engineering of Cereal Crop Plants: A Review", Euphytica, 1995, pp. 35-44,<br>Vol. 85, Kluwer Academic Publishers, Netherlands. ✓  |                |
|                        | C35                      | JOHNSON, P. et al., "Expression of Wild-Type p53 Is Not Compatible with Continued Growth of p53-<br>Negative Tumor Cells", <i>Molecular and Cellular Biology</i> , Jan. 1991, p. 1-11, Vol. 11, No. 1. ✓  |                |
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|                        | C43                      | MALICKI, J. et al. "A human <i>HOX4B</i> regulatory element provides head-specific expression in<br><i>Drosophila</i> embryos", <i>Nature</i> , 23 July 1992, pp. 345-357, Vol. 358. ✓  |                |
|                        | C44                      | NAKAYAMA, J. et al. "Cloning of a Candidate cDNA Encoding a Proteinaceous Component of<br>Mammalian Telomerase", <i>Molecular Biology Cell Abstracts Supp.</i> 7, 1996, p. 875-884, 286a Section<br>1664. ✓   |                |
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|-----------------------|--|--------------------|--|
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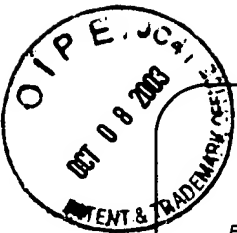
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|------------------------|--------------------------|---|----------------|
|                        | C49                      | RHYU, M.S. "Telomeres, telomerase, and immortality"; <i>J. Natl. Cancer Inst.</i> ; 21 June 1995; pp. 884-894, Vol. 87, No. 12. ✓   |                |
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|                        | C55                      | WINTER, G. & HARRIS, W. "Humanized Antibodies", <i>Trends Pharmacol. Sci.</i> , May 1993, pp. 139-143, Vol. 14. ✓   |                |
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1.634 \$

PTO/SB/17 (08-03)

# FEE TRANSMITTAL for FY 2003

Effective 01/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$ ) 180

Complete if Known

|                      |                   |
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## METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit Card ☐ Money Order ☐ Other ☐ None

☒ Deposit Account:

Deposit  
Account  
Number

20-1430

Deposit  
Account  
Name

Townsend and Townsend and Crew LLP

The Director is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☒ Credit any overpayments  
☒ Charge any additional fee(s) during the pendency of this application  
☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

## FEE CALCULATION

### 1. BASIC FILING FEE

| Large Entity |          | Small Entity |          | Fee Description        | Fee Paid |
|--------------|----------|--------------|----------|------------------------|----------|
| Fee Code     | Fee (\$) | Fee Code     | Fee (\$) |                        |          |
| 1001         | 750      | 2001         | 375      | Utility filing fee     |          |
| 1002         | 330      | 2002         | 165      | Design filing fee      |          |
| 1003         | 520      | 2003         | 260      | Plant filing fee       |          |
| 1004         | 750      | 2004         | 375      | Reissue filing fee     |          |
| 1005         | 160      | 2005         | 80       | Provisional filing fee |          |
| SUBTOTAL (1) |          |              |          |                        | (\$ )    |

### 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

| Total Claims       |      | Extra Claims |   | Fees from below |   | Fee Paid |
|--------------------|------|--------------|---|-----------------|---|----------|
|                    | ** = |              | X |                 | X |          |
| Independent Claims | ** = |              | X |                 | X |          |
| Multiple Dependent |      |              | X |                 | X |          |

| Large Entity |          | Small Entity |          | Fee Description  |
|--------------|----------|--------------|----------|--|
| Fee Code     | Fee (\$) | Fee Code     | Fee (\$) |  |
| 1202         | 18       | 2202         | 9        | Claims in excess of 20                                     |
| 1201         | 84       | 2201         | 42       | Independent claims in excess of 3                          |
| 1203         | 280      | 2203         | 140      | Multiple dependent claim, if not paid                      |
| 1204         | 84       | 2204         | 42       | ** Reissue independent claims over original patent         |
| 1205         | 18       | 2205         | 9        | ** Reissue claims in excess of 20 and over original patent |
| SUBTOTAL (2) |          |              |          | (\$ )  |

\*\*or number previously paid, if greater; For Reissues, see above

## FEE CALCULATION (continued)

### 3. ADDITIONAL FEES

| Large Entity |          | Small Entity |          | Fee Description  | Fee Paid |
|--------------|----------|--------------|----------|--|----------|
| Fee Code     | Fee (\$) | Fee Code     | Fee (\$) |  |          |
| 1051         | 130      | 2051         | 65       | Surcharge - late filing fee or oath  |          |
| 1052         | 50       | 2052         | 25       | Surcharge - late provisional filing fee or cover sheet.                    |          |
| 1053         | 130      | 1053         | 130      | Non-English specification  |          |
| 1812         | 2,520    | 1812         | 2,520    | For filing a request for reexamination                                     |          |
| 1804         | 920*     | 1804         | 920*     | Requesting publication of SIR prior to Examiner action                     |          |
| 1805         | 1,840*   | 1805         | 1,840*   | Requesting publication of SIR after Examiner action                        |          |
| 1251         | 110      | 2251         | 55       | Extension for reply within first month                                     |          |
| 1252         | 410      | 2252         | 205      | Extension for reply within second month                                    |          |
| 1253         | 930      | 2253         | 465      | Extension for reply within third month                                     |          |
| 1254         | 1,450    | 2254         | 725      | Extension for reply within fourth month                                    |          |
| 1255         | 1,970    | 2255         | 985      | Extension for reply within fifth month                                     |          |
| 1401         | 320      | 2401         | 160      | Notice of Appeal   |          |
| 1402         | 320      | 2402         | 160      | Filing a brief in support of an appeal                                     |          |
| 1403         | 280      | 2403         | 140      | Request for oral hearing   |          |
| 1451         | 1,510    | 1451         | 1,510    | Petition to institute a public use proceeding                              |          |
| 1452         | 110      | 2452         | 55       | Petition to revive - unavoidable   |          |
| 1453         | 1,300    | 2453         | 650      | Petition to revive - unintentional   |          |
| 1501         | 1,300    | 2501         | 650      | Utility issue fee (or reissue)   |          |
| 1502         | 470      | 2502         | 235      | Design issue fee   |          |
| 1503         | 630      | 2503         | 315      | Plant issue fee  |          |
| 1460         | 130      | 1460         | 130      | Petitions to the Commissioner  |          |
| 1807         | 50       | 1807         | 50       | Petitions related to provisional applications                              | 180      |
| 1806         | 180      | 1806         | 180      | Submission of Information Disclosure Stmt                                  |          |
| 8021         | 40       | 8021         | 40       | Recording each patent assignment per property (times number of properties) |          |
| 1809         | 750      | 2809         | 375      | Filing a submission after final rejection (37 CFR § 1.129(a))              |          |
| 1810         | 750      | 2810         | 375      | For each additional invention to be examined (37 CFR § 1.129(b))           |          |
| 1801         | 750      | 2801         | 375      | Request for Continued Examination (RCE)                                    |          |
| 1802         | 900      | 1802         | 900      | Request for expedited examination of a design application                  |          |

Other fee (specify) \_\_\_\_\_

\*Reduced by Basic Filing Fee Paid SUBTOTAL (3)

(\$ )180

## SUBMITTED BY

Complete (if applicable)

|                   |                   |                                   |        |           |              |
|-------------------|-------------------|-----------------------------------|--------|-----------|--------------|
| Name (Print/Type) | Scott L. Ausenhus | Registration No. (Attorney/Agent) | 42,271 | Telephone | 303-571-4000 |
| Signature         |                   |                                   |        | Date      |              |

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